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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TRACEY R. THOMAS

Appeal 2017-002936
Application 12/756,346
Technology Center 3600

Before THU A. DANG, JOHN A. EVANS, and
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks our review under 35 U.S.C. § 134(a) from the Final Rejection of claims 1, 3–10, 22, 24–28, and 30–34, i.e., all pending claims.

We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies the real party in interest as Gula Consulting Limited Liability Company. App. Br. 2.

STATEMENT OF THE CASE

The Invention

According to the Specification, the “invention relates generally to money management, and more particularly, to the hierarchical distribution of income among a user’s savings account and a user’s debts, wherein the distribution may include various forms of transferring funds.” Spec. ¶ 2.² The Specification explains that a system “provides recommendations related to the prioritization of paying certain bills and the amount to pay for each bill based upon, for example, savings goals, [a] community recommendation, minimizing penalties/fees associated with [a] user’s debts, minimum amounts due, due dates and available income,” and then the system and/or the user “determine[s] a payment hierarchy.” Abstract.

Exemplary Claim

Independent claim 1 exemplifies the claims at issue and reads as follows (with formatting added for clarity):

1. A method comprising:

receiving, by a computer-based system, financial information relating to a user, wherein the financial information includes information relating to a plurality of debt obligations of the user and income information corresponding to the user;

determining, by the computer-based system, a proposed payment hierarchy based on the received financial information;

the computer-based system receiving first web-based community information gathered from one or more websites;

² This decision uses the following abbreviations: “Spec.” for the Specification, filed April 8, 2010; “Final Act.” for the Final Office Action, mailed February 19, 2016; “App. Br.” for the Appeal Brief, filed August 19, 2016; “Ans.” for the Examiner’s Answer, mailed October 20, 2016; and “Reply Br.” for the Reply Brief, filed December 19, 2016.

the computer-based system applying an artificial intelligence tool to the first web-based community information and to additional community information gathered from one or more data sources to produce modified community information,

wherein applying the artificial intelligence tool includes the computer-based system updating a machine-readable knowledge base,

wherein the additional community information includes information relating to a plurality of other users,

wherein the modified community information includes one or more assessments of the proposed payment hierarchy received from one or more of the plurality of other users who have been determined, via an objective analysis using a predetermined algorithm, to share one or more particular financial characteristic criteria with the user,

wherein the modified community information produced via the application of the artificial intelligence tool excludes data from at least one of the other users who does not meet the one or more particular financial characteristic criteria;

based on the modified community information produced from applying the artificial intelligence tool, the computer-based system determining a final payment hierarchy at least partially based on the one or more assessments, wherein the final payment hierarchy specifies a savings amount of the user, a timing for transferring the savings amount to an account of the user, and timings for paying one or more of the plurality of debt obligations; and

the computer-based system transmitting the final payment hierarchy to a web browser of the user via an encrypted communication channel.

App. Br. 19–20 (Claims App’x).

The Rejection on Appeal

Claims 1, 3–10, 22, 24–28, and 30–34 stand rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 3–6.

ANALYSIS

We have reviewed the rejection in light of Appellant’s arguments that the Examiner erred. For the reasons explained below, we concur with the Examiner’s conclusion concerning ineligibility under § 101. We adopt the Examiner’s findings and reasoning in the Final Office Action (Final Act. 3–6) and Answer (Ans. 2–3). We add the following to address and emphasize specific findings and arguments.

The § 101 Rejection of Claims 1, 3–10, 22, 24–28, and 30–34

INTRODUCTION

The Patent Act defines patent-eligible subject matter broadly: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. In *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 70 (2012), and *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347, 2354 (2014), the Supreme Court explained that § 101 “contains an important implicit exception” for laws of nature, natural phenomena, and abstract ideas. *See Diamond v. Diehr*, 450 U.S. 175, 185 (1981). In *Mayo* and *Alice*, the Court set forth a two-step analytical framework for evaluating patent-eligible subject matter: First, “determine whether the claims at issue are directed to” a patent-ineligible concept, such as an abstract idea. *Alice*, 134 S. Ct. at 2355. If so,

“consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements” add enough to transform the “nature of the claim” into “significantly more” than a patent-ineligible concept. *Id.* at 2355, 2357 (quoting *Mayo*, 566 U.S. at 79); see *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Step one in the *Mayo/Alice* framework involves looking at the “focus” of the claims at issue and their “character as a whole.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Step two involves the search for an “inventive concept.” *Alice*, 134 S. Ct. at 2355; *Elec. Power Grp.*, 830 F.3d at 1353. An “inventive concept” requires more than “well-understood, routine, conventional activity already engaged in” by the relevant community. *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1047 (Fed. Cir. 2016) (quoting *Mayo*, 566 U.S. at 79–80). But “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). Under step two, “an inventive concept must be evident in the claims.” *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

MAYO/ALICE STEP ONE

The Examiner determines that claim 1 is directed to the abstract idea of “debt elimination strategies,” in particular, “determining a proposed payment hierarchy, receiving web-based community information, applying an artificial intelligence tool and determining a final payment hierarchy.” Final Act. 3. The Examiner explains that the abstract idea resembles

“certain methods of organizing human activity . . . determined by the courts to be abstract ideas.” *Id.* at 3–4.

Appellant disputes the Examiner’s determination and argues that “the claims can better be characterized as a specific software and/or hardware based solution in the realm of automated bill payment technologies.” App. Br. 9. Appellant also argues that the Examiner generalizes claim features “to an arbitrary degree” and “is not addressing the actual claim language.” Reply Br. 2–3.

Appellant’s arguments do not persuade us of Examiner error because the Examiner accurately assesses claim 1’s “focus” and its “character as a whole.” *See Elec. Power Grp.*, 830 F.3d at 1353; Final Act. 3–4. We agree with the Examiner that claim 1 encompasses a method of organizing human activity. Final Act. 3–4.

Claim 1 recites a series of steps for generating and communicating a payment plan. App. Br. 19–20. The claimed series of steps resembles the claimed “series of steps instructing how to hedge risk” in a commodities market in *Bilski v. Kappos*, 561 U.S. 593, 599 (2010). In *Alice*, the Supreme Court explained that the claims in *Bilski* concerned a method of organizing human activity. *Alice*, 134 S. Ct. at 2356; *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (deeming the claim at issue “not meaningfully different from the ideas found to be abstract in other cases before the Supreme Court and our court involving methods of organizing human activity”).

In addition, claim 1 covers data collection, manipulation, and communication. App. Br. 19–20 (Claims App’x). The Federal Circuit has ruled that claims covering data collection, manipulation, and communication

were directed to abstract ideas. *See, e.g., SAP Am., Inc. v. Investpic, LLC*, No. 2017-2081, 2018 WL 2207254, at *2, 4–5 (Fed. Cir. May 15, 2018); *Smart Sys. Innovations, LLC v. Chi. Transit Auth.*, 873 F.3d 1364, 1368–73 (Fed. Cir. 2017); *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1047, 1054–56 & n.6 (Fed. Cir. 2017); *Elec. Power Grp.*, 830 F.3d at 1351–54.

MAYO/ALICE STEP TWO

The Examiner determines that claim 1 includes additional elements for collecting, manipulating (analyzing/filtering), and communicating data. Final Act. 4; *see* Ans. 2. The Examiner also determines that: (1) the additional elements are not “sufficient to amount to significantly more than the judicial exception because the limitations of the claim[] do not improve another technology or technical field or the functioning of the computer itself”; and (2) “there are no meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment.” Final Act. 4–6; *see* Ans. 2–3.

Appellant quotes a May 2016 Memorandum from Deputy Commissioner Bahr (“May 2016 Update”) that provides examination instructions, i.e., “it is particularly critical to address the combination of additional elements, because while individually-viewed elements may not appear to add significantly more, those additional elements when viewed in combination may amount to significantly more than the exception by meaningfully limiting the judicial exception.” App. Br. 9–10 (quoting May 2016 Update 3) (emphasis omitted). Appellant then contends that the Examiner “neglects to address a substantial majority of the language of the claim, and thus fails to account for the claim language as a whole, as the

Office requires.” *Id.* at 10. Further, Appellant asserts that the Examiner “fails to provide a reasoned explanation that supports the conclusion that the additional elements individually and in combination with each other are ‘well-understood, routine, conventional elements.’” *Id.* at 11; *see* Reply Br. 2–3.

Appellant’s arguments do not persuade us of Examiner. As additional elements, claim 1 recites “a computer-based system,” “a machine-readable knowledge base,” “a web client of a user computing device,” and “an encrypted communications channel.” App. Br. 19–20 (Claims App’x). The Examiner finds that “the claimed computer/system is a general use computer and the claimed processes may be practiced on any computer so programmed.” Final Act. 6; *see* Spec. ¶¶ 139, 142, 144–150. Further, the Specification demonstrates that the additional elements are conventional to a skilled artisan. *See, e.g.*, Spec. ¶¶ 142, 148–149, 152–153, 163–164, 209.

The Specification explains that: (1) a “machine-readable knowledge base stores knowledge in a computer-readable form”; and (2) “one of skill in the art will recognize” that “a knowledge based system may comprise an artificial intelligence tool working to provide intelligent decisions with justification.” Spec. ¶ 209. The Specification cites a textbook concerning knowledge-based systems, i.e., Rajendra A. Akerkar and Priti S. Sajja, *Knowledge-Based Systems* (2009). *Id.*

The Specification describes a “web client” as: (1) “any hardware and/or software suitably configured to facilitate input, receipt and/or review of any information” discussed in the Specification; (2) “any device (e.g., personal computer, mobile device, phone, etc.) which communicates via any network”; and (3) “any suitable personal computer, network computer,

workstation, personal digital assistant, cellular phone, smart phone, minicomputer, mainframe or the like.” Spec. ¶¶ 148–149. The Specification notes that a “web client” may include “conventional” software “typically associated with computers.” *Id.* ¶ 149.

The Specification describes a “user computing device” as a “computing unit in the form of a personal computer” and “computing units” including “laptops, notebooks, hand held computers, set-top boxes, cellular telephones, touch-tone telephones and the like.” Spec. ¶ 164; *see id.* ¶ 148. The Specification notes that a “user computer” may include a commercially available operating system and “conventional” software “typically associated with computers.” *Id.* ¶ 152.

Further, the Specification explains that “the present invention” may employ: (1) a wide variety of commonly used “communication channels, such as, for example, a telephone network, an extranet, an intranet, Internet, point of interaction device (point of sale device, personal digital assistant, cellular phone, kiosk, etc.), online communications, off-line communications, wireless communications, transponder communications, local area network (LAN), [and] wide area network (WAN)”;

and (2) “any number of conventional techniques for data transmission, signaling, data processing, network control, and the like.” Spec. ¶¶ 153, 163; *see id.* ¶ 142. The Specification notes that “information related to the protocols, standards, and application software utilized in connection with the Internet is generally known to those skilled in the art.” *Id.* ¶ 153. The Specification cites three textbooks concerning “cryptography and network security”: (1) Bruce Schneier, *Applied Cryptography: Protocols, Algorithms, and Source Code in C* (2d ed. 1996); (2) Jonathan Knudson, *Java Cryptography* (1998); and

(3) William Stallings, *Cryptography and Network Security: Principles and Practice* (3d ed. 1999). *Id.* ¶ 163.

Court decisions have recognized that generic computer components operating to collect, manipulate, and communicate data are well understood, routine, and conventional to a skilled artisan. *See, e.g., Alice*, 134 S. Ct. at 2360; *SAP Am.*, 2018 WL 2207254, at *2, 6; *Intellectual Ventures I v. Symantec Corp.*, 838 F.3d 1307, 1318–20 (Fed. Cir. 2016); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014); *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 993 (Fed. Cir. 2014).

Appellant also contends that “the fact that no prior art rejections have been advanced against the claims” demonstrates that “the claims as a whole are novel and nonobvious, and therefore not ‘conventional.’” App. Br. 11 (emphasis omitted). According to Appellant, to the extent claim 1 recites “claim elements [that] are novel and non-obviousness, the claim elements are similarly non-conventional and non-generic.” *Id.* at 12 (emphasis omitted). Further, Appellant asserts that claim 1 “provides an improvement in the technological field of computer-based automatic bill payment systems.” *Id.* at 12–13.

Appellant’s arguments do not persuade us of Examiner error. “The search for a § 101 inventive concept is . . . distinct from demonstrating § 102 novelty.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016); *see Diehr*, 450 U.S. at 188–89; *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017).

“[U]nder the *Mayo/Alice* framework, a claim directed to a newly discovered law of nature (or natural phenomenon or abstract idea) cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016). “[A] claim for a *new* abstract idea is still an abstract idea.” *Synopsys*, 839 F.3d at 1151. Similarly, a claim for a beneficial abstract idea is still an abstract idea. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379–80 (Fed. Cir. 2015). Further, the Federal Circuit has expressly rejected the notion that “abstract ideas remain patent-eligible under § 101 as long as they are new ideas, not previously well known, and not routine activity.” *Ultramercial*, 772 F.3d. at 714–16; *see* Ans. 2 (citing *Ultramercial*, 772 F.3d. at 716).

Thus, claim 1’s alleged novelty, nonobviousness, and benefits fail to provide an “inventive concept” needed to satisfy *Mayo/Alice* step two. As the Examiner determines, the claimed subject matter does not “improve another technology or technical field or the functioning of the computer itself.” Final Act. 5–6.

Moreover, claim 1 automates steps for generating a payment plan.³ *See* Ans. 2. The “mere automation of manual processes using generic

³ In the event of continued prosecution, the Examiner should consider (1) the applicability of 35 U.S.C. § 112 ¶ 6 to the limitations in the computer-readable medium claims and (2) whether under 35 U.S.C. § 112 ¶ 2 the Specification discloses adequate corresponding structure, e.g., a suitable algorithm, for accomplishing the functions assigned to each limitation, e.g., the “determining a proposed payment hierarchy” limitation. *See, e.g., Advanced Ground Info. Sys., Inc. v. Life360, Inc.*, 830 F.3d 1341, 1349–50 (Fed. Cir. 2016); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348–54 (Fed. Cir. 2015) (en banc in relevant part); *EON Corp. IP Holdings LLC v.*

computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance*, 859 F.3d at 1055.

Appellant further “asserts that the present claims do not preempt the alleged abstract idea” and “do not preempt every possible computer-based system that is directed to ‘debt elimination strategies.’” App. Br. 13–14 (citing *BASCOM*, 827 F.3d at 1352).

Appellant’s assertions do not persuade us of Examiner error. *See* Ans. 3 (addressing preemption). While preemption may denote patent ineligibility, its absence does not demonstrate patent eligibility. *See FairWarning, IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016). For claims covering a patent-ineligible concept, preemption concerns “are fully addressed and made moot” by an analysis under the *Mayo/Alice* framework. *Ariosa*, 788 F.3d at 1379.

BASCOM does not help Appellant. There, the claims recited a “specific method of filtering Internet content” requiring “the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *BASCOM*, 827 F.3d at 1345–46, 1350. The Federal Circuit reasoned that the claims covered “a technology-based solution . . . to filter content on the Internet that overcomes existing problems with other Internet filtering systems” and

AT&T Mobility LLC, 785 F.3d 616, 624 (Fed. Cir. 2015). Where a means-plus-function limitation recites two or more functions, the specification “must disclose adequate corresponding structure to perform *all* of the claimed functions.” *Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1374 (Fed. Cir. 2015); *see Williamson*, 792 F.3d at 1351–52; *see also Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1318–19 (Fed. Cir. 2012) (means-plus-function limitation specifying two functions).

“improve[s] an existing technological process.” *Id.* at 1351 (citing *Alice*, 134 S. Ct. at 2358); *see Alice*, 134 S. Ct. at 2358 (explaining that “the claims in *Diehr* were patent eligible because they improved an existing technological process”).

In contrast to *BASCOM*, the claims here do not cover a technology-based solution that improves an existing technological process. *See* Final Act. 5–6. Among other things, they do not require any unconventional network configurations or any uncommon communications. “[C]laiming the improved speed or efficiency inherent with applying the abstract idea on a computer” does not “provide a sufficient inventive concept.” *Intellectual Ventures*, 792 F.3d at 1367.

Based on *BASCOM*, Appellant asserts that “[t]he Federal Circuit uses a preemption analysis in determining that the claims at issue recite significantly more than the alleged abstract idea.” Reply Br. 3–4. We disagree.

In *BASCOM*, the Federal Circuit discussed certain cases cited by the parties where the claims preempted all use of the claimed abstract idea on the Internet or on generic computer components performing conventional activities. *BASCOM*, 827 F.3d at 1352. But that discussion does not mean that the Federal Circuit uses a preemption analysis to determine patent eligibility. Instead, the court has explained that for claims covering a patent-ineligible concept, preemption concerns “are fully addressed and made moot” by an analysis under the *Mayo/Alice* framework. *Ariosa*, 788 F.3d at 1379; *see FairWarning*, 839 F.3d at 1098.

SUMMARY FOR INDEPENDENT CLAIM 1

For the reasons discussed above, Appellant's arguments have not persuaded us of any error in the Examiner's findings or conclusions under *Mayo/Alice* step one or step two. Hence, we sustain the § 101 rejection of claim 1.

INDEPENDENT CLAIMS 22 AND 28 AND
DEPENDENT CLAIMS 3–10, 24–27, AND 30–34

Appellant does not argue patentability separately for independent claims 22 and 28 or dependent claims 3–10, 24–27, and 30–34. App. Br. 7–14; Reply Br. 2–4; *see In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (explaining that the applicable rules “require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion” of patentability). Because Appellant does not argue the claims separately, we sustain the § 101 rejection of claims 3–10, 22, 24–28, and 30–34 for the same reasons as claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

DECISION

We affirm the Examiner's decision to reject claims 1, 3–10, 22, 24–28, and 30–34 under 35 U.S.C. § 101.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED